California Regional Water Quality Control Board
North Coast Region

Order No. R1-2003-0062
NPDES No. CA0025054

Waste Discharge Requirements

For

The City Of Santa Rosa, the County Of Sonoma
and
The Sonoma County Water Agency
Storm Water Discharges From
Municipal Separate Storm Sewer Systems

Sonoma County

The California Regional Water Quality Control Board, North Coast Region, (hereinafter Regional Water Board) finds that:

1. The City of Santa Rosa, the County of Sonoma and the Sonoma County Water Agency (hereinafter Permittees) jointly submitted a Report of Waste Discharge dated September 28, 2001. The report was submitted to request renewal of Waste Discharge Requirements under the National Pollutant Discharge Elimination System (NPDES) to permit discharge of storm water from municipal separate storm sewer systems (MS4s) within their jurisdictions.

2. Section 402(p) of the federal Clean Water Act (CWA), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges from separate municipal storm drain systems, storm water discharges associated with industrial activity (including construction activities), and designated storm water discharges which are considered significant contributors of pollutants to waters of the United States. On November 16, 1990, the United States Environmental Protection Agency (hereinafter U.S. EPA) published regulations (40 CFR Part 122) which prescribe permit application requirements for municipal separate storm drain systems pursuant to Section 402(p) of the CWA. On May 17, 1996, U.S. EPA published an Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems (MS4s), which provided guidance on permit application requirements for regulated MS4s.

3. Section 402(p) of the CWA (33 U.S.C. Section 1342(p)) provides that MS4 permits must "require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), including management practices, control techniques and system, design engineering method and such other provisions as the [U.S. EPA] Administrator or the state determines appropriate for the control

of such pollutants." The State Water Board's Office of Chief Counsel (OCC) has issued a memorandum, dated February 11, 1993, interpreting the meaning of MEP to include technical feasibility, cost, and benefit derived with the burden being on the municipality to demonstrate compliance with MEP when rejecting a particular BMP by showing that it is not technically feasible in the locality, that its costs would exceed any benefit to be derived, or that its cost would be prohibitive. (See also *In re Petition of the Cities of Bellflower et al.* (SWRCB 2000) Order No. WQ 2000-11, p. 20.) MEP generally emphasizes pollution prevention and source control BMPs (as first line of defense) in combination with treatment methods as a backup (additional line of defense). Furthermore, it is recognized that the implementation of BMPs to ensure water quality protection is an iterative process. BMPs must be evaluated for success and, when necessary, additional BMPs implemented to provide required water quality protection.

4. The Permittees are currently subject to NPDES Permit No. CA0025054 issued by Order No. 97-3 on March 27, 1997.

5. The Permittees have jurisdiction over and/or maintenance responsibility for their respective MS4s that they own and operate in Sonoma County. The MS4 discharges consist of storm water runoff generated from various land uses discharging into Santa Rosa Creek, the Laguna de Santa Rosa (Laguna), Mark West Creek, the lower Russian River and other surface waters. In addition, various non-storm water discharges enter the MS4 and are discharged to surface waters. The quality and quantity of these discharges varies considerably due to the effects of land use, season, geology, and the sequence and duration of hydrologic events.

6. On September 9, 1997, the Permittees entered into a cooperative agreement to share costs and other resources for implementing NPDES program activities. Within six months of permit re-issuance, the Permittees intend to enter into a new cooperative agreement to reflect changing roles and responsibilities.

7. The first five-year term of the permit provided for an increasingly robust program for all mandated components. The Permittees have implemented many programs and policies intended to control the discharge of pollutants into their MS4 systems. Due to the differences in their levels of responsibility and authority, each Permittee has developed and implemented their own individual program. However, where possible, consistent strategies are implemented throughout the permit area. Examples of first-term accomplishments include: implementing a spill response and enforcement program; implementing a year-round inspection program focusing on erosion and non-storm water discharge control; conducting ongoing education and outreach activities; biological and chemical monitoring; and the establishment of a refined working relationship between the Permittees and the Regional Water Board with respect to reducing pollutants of concern in

storm water runoff. The Permittees are committed to continue to implement an effective combination of these programs and policies and will implement additional programs as identified in this Order which will ensure that pollutant loads resulting from storm water runoff are properly controlled and managed to the MEP.

8. The previous Order defined a permit boundary which consisted of the existing Santa Rosa city limits, areas tributary to the City, county islands within the City limits and the City's future urban growth boundary. Many areas of the watershed were not included within the permit boundary of the first-term permit. Since these additional areas do discharge storm water runoff and do contribute, cumulatively, to the water quality impairment of downstream receiving waters, this proposed Order expands the permit boundary to apply to all City and County controlled MS4s within the Mark West Creek/Laguna de Santa Rosa watershed. This modification will address the connected storm water infrastructure currently in place as well as future additions to the system. This modification will help provide a consistent watershed-wide effort to control all MS4 sources of pollutants to receiving waters within the watershed. In making this modification to the permitted area, the Regional Water Board recognizes that there will be different Permittee control strategies and implementation timelines needed for different land use areas. The Regional Water Board recognizes that not all permitted areas may need the same types of management practices or level of activity. For the purposes of this Order, the permit boundary shall consist of all areas controlled by the Permittees that drains, directly or indirectly, into Mark West Creek, its tributaries or any isolated surface waters within this watershed (Mark West watershed). Additionally, Sonoma County has requested that some unincorporated areas required to be permitted under the Phase II storm water program be included in this permit. The two specified areas to be included are the county areas within and surrounding the City limits of Healdsburg and the unincorporated areas within and surrounding the community of Graton. These areas are identified as "urban clusters" by the U.S. Census Department in the 2000 Census and are included as part of the expanded permit boundary (reference map enclosed as Attachment A).

9. This Order and its requirements are not intended to restrict or control local land use decision-making authority. The Permittees retain authority to make the final land-use decisions and retain full statutory authority for deciding what land uses are appropriate at specific locations within each Permittees' jurisdiction. The Regional Water Board recognizes that the Permittees' land use authority allows urban developments that may generate pollutants and runoff that could impair receiving water quality and beneficial uses. The Permittees are therefore responsible for considering potential storm water impacts when making planning decisions in order to fulfill the Clean Water Act (CWA) requirement to reduce the discharge of pollutants in municipal storm water to the maximum extent practicable (MEP). This responsibility requires the Permittees to exercise their legal authority to ensure that any increased pollutant loads and flows do not affect the beneficial uses of the receiving water. The Sonoma County Water Agency

(Agency) does not have broad land use authority and can control activities only on its own property. Therefore, not all requirements in this Order are applicable to Agency. References to the Agency's land-use authority refer only to the boundaries of its fee-owned flood control channels.

10. This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Health Services or local vector agencies in accordance with California Health and Safety Code Section 2270 *et seq*. and Section 116110 *et seq*. Certain storm water treatment controls if not properly designed, operated or maintained may create habitats for vectors (e.g. mosquito and rodents). This Order expects the Permittees to closely cooperate and collaborate with local vector control agencies and the State Department of Health Services for the implementation, operation, and maintenance of storm water treatment controls in order to minimize the risk to public health from vector borne diseases.

Discharge Characteristics

11. Watershed development and urbanization results in increased pollutant loading, runoff volume and discharge velocity to receiving waters. In many cases, natural vegetated, pervious areas are converted to impervious surfaces such as paved highways, streets, rooftops and parking lots. In other areas, natural ground surfaces are graded or otherwise disturbed and subject to erosion and sediment discharge. Natural vegetated soil can both absorb rainwater and can act to remove pollutants, thereby providing an effective natural purification process. In contrast, pavement and concrete has limited ability to absorb water and remove pollutants, and thus the natural purification characteristics are lost. In addition, urban development creates new pollution sources as the increased density of human population brings proportionately higher amounts of vehicle emissions, vehicle maintenance wastes, municipal sewage waste, pesticides, household hazardous wastes, pet wastes, trash, and other anthropogenic pollutants. Storm water runoff from these developed areas can collect and mobilize these pollutants. In most cases, the runoff from these developed areas is discharged directly to streams and rivers.

12. Urban development also changes the quantity and flow characteristics of storm water runoff as compared to undeveloped conditions. Increases to the volume and velocity of storm water runoff due to development has the potential to greatly accelerate streambank erosion and impair stream habitat in receiving waters. Studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving waters. Significant declines in the biological integrity and physical habitat of streams and other receiving waters have been found to occur with as little as 10 percent conversion from natural to impervious surfaces. Percentage of impervious cover is a reliable indicator and predictor of potential water quality degradation expected from new development.

13. The quality and quantity of MS4 discharges vary considerably because of the effects of hydrology, geology, land use, season, and sequence and duration of precipitation events. Urban storm water runoff discharges typically contain pollutants that lower the quality of receiving waters and impact beneficial uses of receiving waters. Nationwide studies have shown exceedances of water quality standards including instances of aquatic toxicity in receiving waters as a result of urban storm water discharges. Specific pollutants are contained in storm water include, but are not limited to, heavy metals (from sources such as automobiles, metal pipes, etc); sediments; petroleum hydrocarbons (from sources such as leaking automobiles, minor spills, etc.); microbial pathogens (from sewer overflows, failing domestic wastewater systems, etc.); pesticides (from over application, spills, etc.); nutrients (from fertilizer application, decomposing plant material, etc.); and litter. Excessive flow rates of storm water may cause or contribute to downstream erosion and/or excessive sediment discharge and deposition in stream channels.

14. Water quality assessments conducted by the Regional Water Board and others have identified impairment, or threatened impairment, of beneficial uses of water bodies within the Mark West Creek watershed. The causes of impairments include pollutants of concern that are typically contained in municipal storm water discharges. Pollutants in storm water can have damaging effects on both human health and aquatic ecosystems. Pollutants of concern within the Mark West Creek watershed include: sediments; temperature; nutrients; and pathogens. A one-time annual pollutant loading estimate was submitted in the Permittees' Part II application (1996). Loading estimates for Santa Rosa Creek were determined for sediments and nutrients (TSS: 21,400 tons; TDS: 9,600 tons; Phosphorus: 31 tons; Nitrate: 36 tons; TKN: 85 tons; Total Organic Nitrogen: 78 tons). This estimate was based on limited monitoring data and was not intended to quantify loadings for other runoff years. Implementation of the MS4 program since 1997 is expected to have resulted in reductions in pollutant loadings to receiving waters. This Phase 1 permit renewal contains additional program elements specifically intended to focus on sediment and nutrient pollutant reduction.

15. The discharge of wash waters and other non-storm water flows as well as contaminated storm water from some categories of industries and businesses is an environmental threat that can adversely impact public health and the environment. Pollutants contained in such discharges include organic material from food waste, oil and grease, sediment, nutrients and toxic chemicals. The permittees are required to implement programs to eliminate or reduce the discharge of non-storm water discharges to the MS4 systems. Certain pollutants present in storm water and/or urban runoff may be derived from extraneous sources that the Permittees have no or limited jurisdiction over. Examples of such pollutants and their respective sources are: polycyclic aromatic hydrocarbons (PAHs) which are products of internal combustion engine operation, nitrates, bis (2-ethylhexyl) phthalate and mercury from atmospheric deposition, lead from fuels, copper from brake pad wear, zinc from tire wear, dioxins as products of combustion, and

naturally occurring minerals from local geology. The implementation of the measures set forth in this Order is intended to reduce the entry of these pollutants into storm water and their discharge to receiving waters.

Storm Water Management Plan

16. The Permittees' September 28, 2001, Permit Re-Application Package included the Program's draft Storm Water Management Plan (hereinafter Management Plan). Revisions to the Management Plan were submitted on March 10, 2003. The intent of the Management Plan is to identify specific tasks and programs to reduce the discharge of pollutants in storm water to the MEP in a manner designed to achieve compliance with water quality standards and objectives. The Management Plan identifies measures to effectively prohibit non-storm water discharges into municipal storm drain systems and watercourses within the Permittees' jurisdictions. The Management Plan fulfills the Regional Water Board's permit application requirements subject to the condition that it will be improved and revised in accordance with the provisions of this Order. Each of the Permittees developed individual plans that were incorporated into the program Management Plan. The Management Plan defines the actions and sets measurable goals that will meet the MEP standard. Therefore, the Management Plan is hereby incorporated into this Order and is an enforceable component of this Order. A summary of the Management Plan is included with this Order as Attachment B.

17. The Management Plan describes a framework for management of storm water discharges during the term of this permit. The Management Plan describes the Program's goals, objectives and activities, and the annual reporting and program evaluation process. Measurable goals and associated implementation dates, which represent the baseline level of effort required of each of the Permittees, are contained in the Management Plan. They will serve as a reference point upon which to base overall program effectiveness evaluations. Each of the Permittees is individually responsible for implementing their own individual Management Plan components to reduce, control and/or otherwise address sources of pollutants for within their jurisdiction. These components contain individual strategies for urban runoff control, including specific measurable goals, BMPs and implementation schedules, and procedures that detail how these control measures will be achieved.

18. Joint program activities that are described in the Management Plan include:

    a. Program Management – This program's goals are to: facilitate communication and coordination between the Permittees, Regional Water Board and other appropriate entities; ensure the Management Plan elements are implemented on schedule; and ensure that all requirements of the permit are met. Program management includes annual reporting and effectiveness evaluations.

b. Santa Rosa Area Standard Urban Storm Water Mitigation Plan (SRA-SUSMP) – This program outlines post construction storm water control, treatment and disposal measures for new development and significant redevelopment. Program goals are to manage storm water runoff from new development and significant redevelopment for both quality and quantity, as close to the point of origin as possible, through design and engineered measures.

c. Monitoring Program – This program's chemical and biological monitoring goal is to assess receiving water quality and direct efforts towards controlling pollutants of concern.

Specific program activities are focused on the following elements:

- Legal Authority
- Private Construction
- Industrial and Commercial Discharge Sources
- Municipal Operations
- Public Construction Activities Management
- Landscape and Recreational Facilities Management
- Storm Drain System Operation and Management
- Street and Road Maintenance
- Parking Facilities Management
- Emergency Procedures
- Illicit Discharge Detection and Elimination
- Public Education and Outreach
- Industrial/Commercial Outreach
- School Education
- Effectiveness Evaluation
- Fiscal Analysis

The Management Plan specifically identifies the individual activities, goals, schedules, and limitations for each Permittee. The Management Plan contains an "At a Glance" section that provides an easy-to-read listing of activities each Permittee has proposed to conduct during the permit term. The Management Plan also includes a description of programs that are not specifically required by this Order either because they are administered by entities not subject to the permit or are financed by funds not devoted for MS4 permit compliance. Descriptions of some of these programs and activities have been included to provide a comprehensive depiction of storm water activities taking place within the watershed.

19. The Management Plan contains specific measurable goals that the Permittees believe would achieve pollution reductions to the MEP. The selection of the measurable goals was made using projections of future revenues to fund the implementation of these goals. Those revenue projections may change considerably over the permit term, especially when considering forecasts for the state budget as a whole. If the state makes budgetary changes that reduce available discretionary funding for the municipalities, certain measurable goals now required by the Management Plan may become cost prohibitive. In such budgetary conditions, it may be necessary to delay the implementation of those measurable goals. If this situation occurs, the Permittees can request a delay or modification of the measurable goals. It is expected that these requests will be included in the annual report for that year. The Permittees will have the burden to demonstrate to the Regional Water Board that a delay in measurable goals is appropriate based on a showing of the applicable budgetary constraints, prior best efforts to secure financing, and a plan to prospectively restore the prior level measurable goal implementation. The Permittees will identify the measurable goals proposed to be delayed and will discuss program priorities and funding limitations with Regional Water Board staff. Proposed modifications of the Management Plan to delay the implementation of cost prohibitive measurable goals would then be proposed for consideration by the Regional Water Board at a duly noticed public hearing.

20. The Permittees are dedicated to a process of continuous program review and improvement, which includes seeking new opportunities to control storm water pollution and to protect beneficial uses. The Permittees are committed to working with other agencies and individuals to form mutually beneficial partnerships. The permittees will look for opportunities to obtain grants and other funding sources to improve their storm water program. The Permittees are encouraged to conduct and document peer review of their control and evaluation programs to ensure that they are cost-effective and meet design goals. The Permittees will conduct ongoing evaluations of each relevant element of each Permittee'' program and revise activities, control measures and BMPs as deemed necessary. These reviews can provide an opportunity for local staff to benefit from the experience of other storm water professionals and to explore statewide and national storm water program models that have been shown to be successful in other areas. Any program modifications from this evaluation would be formally proposed for inclusion in the Management Plan in accordance with provisions of this Order.

21. It is the intent of Regional Water Board staff to perform, in coordination with the Permittees and interested persons, an annual performance review and evaluation of the Program and its activities. The reviews are a useful means of evaluating overall Program effectiveness, implementation of measurable goals, and continuous improvement opportunities. The following areas will be evaluated:

a. Overall Program effectiveness;

b. Adherence to measurable goal schedules;

c. Permittees' coordination and implementation of watershed based management actions (e.g., flood management, new development and construction, industrial source controls, public information/participation, monitoring);

d. Partnership opportunities with other local storm water programs; and

e. Consistency in meeting MEP measures within the Program and with other compatible Regional, Statewide, and National municipal storm water management program elements, with respect to pollutants of concern.

New Development Standards
(Santa Rosa Area Standard Urban Storm Water Mitigation Plan)

22. On October 5, 2000, the State Water Board adopted Order WQ 2000-11, a precedential decision concerning the use of Standard Urban Storm Water Mitigation Plans (SUSMP) in MS4 permits for new development and significant redevelopment projects. The SUSMP was initially adopted by the Los Angeles Regional Water Quality Control Board to require specific types of storm water control measures for new and significant redevelopment projects. In considering a petition regarding the Los Angeles SUSMP program, the State Water Board recognized that its decision would include significant legal and policy determinations that are likely to recur (Gov. Code, Section 11425.60). Future Regional Water Board orders are required to be consistent with applicable portions of the State Water Board's precedential decisions. As part of their application package, the Permittees submitted a SUSMP program along with a time schedule for implementation. The program developed by the Permittees is referred to as the Santa Rosa Area Standard Urban Storm Water Mitigation Plan (hereinafter SRA-SUSMP), which has been included in the Management Plan. Some modifications of the SRA-SUSMP program may be necessary in the future as the Permittees move towards program implementation. Because of the precedent set by Order WQ 2000-11, this proposed MS4 permit has incorporated language intended to be consistent with applicable portions of the State Water Board's decision. Language in this permit will require implementation of a program for ensuring that post-development storm water control measures are included in municipal approvals of new development and redevelopment projects. Identified source control and storm water treatment measures shall be designed and implemented in order to eliminate or minimize discharges of pollutants of concern. In addition, the language includes criteria for sizing post-development storm water treatment controls in order to achieve the MEP standard. The sizing criteria include a flow-based standard for use when using a flow-through treatment system (sand filter, constructed wetland, etc.) and a volume-based criterion for use with retention/detention systems. The Permittees are required to certify that the new development programs they implement will be consistent with the language in this Order.

23. Federal regulations (40 CFR 131.10(a)) prohibit states from designating waste transport or waste assimilation as a beneficial use for any water of the United States. Authorizing the construction of a storm water/urban runoff treatment facility in a jurisdictional water body may be considered as accepting waste assimilation as an appropriate use for that water body. Furthermore, the construction and operation of a pollution control facility in a water body can impact the physical, chemical, and biological integrity as well as the beneficial uses of the water body. Therefore, storm water treatment and/or mitigation in accordance with the SRA-SUSMP and any other requirements of this Order must occur prior to the discharge of storm water into a water of the United States.

24. Each Permittee is individually responsible for adopting and enforcing local SRA-SUSMP ordinances necessary to implement effective BMPs to prevent or reduce pollutants in storm water. The Permittees are also responsible for ensuring that adequate permit conditions or funding is in place to cover costs associated with construction, operation, and maintenance of storm water treatment BMPs. This requirement may be implemented by placing conditions into discretionary approvals to implement SRA-SUSMP ordinances and to provide for the long-term operation and maintenance of storm water control measures that are implemented.

Statutory and Regulatory Considerations

25. The CWA authorizes the U.S. Environmental Protection Agency (U.S. EPA) to permit a state to serve as the NPDES permitting authority in lieu of the U.S. EPA. The State of California has in-lieu authority for the NPDES program. The Porter-Cologne Water Quality Control Act authorizes the State Water Resources Control Board (State Water Board), through the Regional Water Boards, to regulate and control the discharge of pollutants into waters of the state. The State Water Board entered into a Memorandum of Agreement with the U.S. EPA, on September 22, 1989, to administer the NPDES Program governing discharges to waters of the United States.

26. The Water Quality Act of 1987 added Section 402(p) to the federal CWA (33 U.S.C. Section 1251-1387). Section 402(p)(3)(B) of this act requires that NPDES permits for discharges from MS4s shall require controls to reduce the discharge of pollutants to the MEP. Section 402(p) also requires the U.S. EPA to establish regulations setting forth NPDES requirements for storm water discharges in two phases:

- The U.S. EPA Phase I storm water regulations were directed at MS4s serving a population of 100,000 or more, including interconnected systems and storm water discharges associated with industrial activities, including construction activities. The Phase I Final Rule was published on November 16, 1990 (55 Federal Register 47990).

- The U.S. EPA Phase II storm water regulations are directed at storm water discharges not covered in Phase I, including small MS4s (serving a population of less than 100,000), small construction projects (one to five acres), municipal facilities with delayed coverage under the Intermodal Surface Transportation Efficiency Act of 1991, and other discharges for which the U.S. EPA Administrator or the State determines that the storm water discharge contributes to a violation of a water quality standard, or is a significant contributor of pollutants to waters of the United States. The Phase II Final Rule was published on 8 December 1999 (64 Federal Register 68722).

27. In addition to the above, MS4s that U.S. EPA or the state determines are contributing to a water quality impairment or are a significant contributor of pollutants to waters of the US are required to obtain permit coverage.

28. This permit is intended to develop, achieve, and implement a timely, comprehensive, cost-effective storm water pollution control program to reduce the discharge of pollutants in storm water to the MEP from the permitted areas in Sonoma County to the waters of the United States subject to the Permittees' jurisdiction.

29. Section 402(p)(3)(B)(ii) of the CWA requires NPDES permits to effectively prohibit non-storm water discharges into MS4s. The CWA's corresponding regulations (40 CFR 122.26(d)(2)(iv)(B)(1)) require control programs to prevent illicit discharges to the MS4s. Certain categories of non-storm water discharges or flows are allowed to enter the MS4s provided that the Permittees have taken steps to minimize their occurrence and to reduce the pollutant loading in such discharges.

30. The State Water Board has issued NPDES General Permits for the regulation of storm water discharges associated with industrial and construction activities. In addition, the Regional Water Board has issued General Permit Order No. 93-61 for dewatering discharges to surface waters including discharges to MS4s owned and operated by the Permittees. Under the CWA, the Permittees cannot enforce these NPDES permits. However, the Permittees, through inspections of these facilities, can implement overlapping local ordinances and permit conditions and can bring NPDES permit violations to the attention of Regional Water Board staff. This division of responsibility will help ensure that industries, businesses, and developers within the Permittees' jurisdiction are not subject to duplication of NPDES storm water regulatory activities.

31. Federal regulations (40 CFR 122.26(d)(2)(iv)(A) and 40 CFR 122.26(d)(2)(iv)(C)) require that MS4 Permittees implement a program to monitor and control pollutants in discharges to the municipal system from industrial and commercial facilities that contribute a substantial pollutant load to the MS4. The regulations require that Permittees establish priorities and procedures for inspection of industrial facilities and priority commercial establishments. This permit, consistent with the U.S. EPA policy, incorporates a cooperative

partnership, including the specifications of minimum expectations, between the Regional Water Board and the Permittees for the inspection of industrial facilities and priority commercial establishments to control pollutants in storm water discharges (58 Federal Register.61157).

32. The Permittees are required to enforce local storm water ordinances and permit conditions at industrial facilities and construction sites. If the Permittees become aware of industrial or construction site discharges that are in violation of statewide general NPDES permits, the Regional Water Board will rely on the Permittees to promptly report the incident to Regional Water Board staff for appropriate follow-up actions. In those areas where the local and state requirements overlap, the staffs of the respective agencies will work together to gain compliance in a streamlined manner.

33. It is the Regional Water Board's intent that this Order shall ensure attainment of applicable water quality objectives and protection of beneficial uses of receiving waters. This Order therefore prohibits discharges from causing violations of water quality objectives or causing conditions to occur that create a condition of nuisance or water quality impairment in receiving waters as a result of MS4 discharge. Accordingly, these requirements shall be addressed through the effective implementation of BMPs to reduce pollutants in storm water discharges.

34. There are federal, state, regional or local entities within the Permittees' boundaries that operate storm drain facilities and/or discharge storm water to storm drains systems regulated by this Order. The Permittees may lack legal jurisdiction over these entities. Consequently, the Regional Water Board recognizes that the Permittees should not be held directly responsible for such facilities and/or discharges. Some of these entities have their own MS4-type discharges to surface waters are required to obtain storm water permit coverage in accordance with the federal EPA Phase II storm water program. If these entities are not required to obtain permit coverage under Phase II but are found to be discharging storm water that causes or threatens to cause a violation of water quality objectives, they may be required to obtain an individual storm water discharge permit from the Regional Water Board. The California Department of Transportation (CalTrans) is a state agency that discharges storm water within the permit boundary. On July 15, 1999, the State Water Resources Control Board issued a separate NPDES storm water permit to CalTrans (NPDES No. CAS000003 - Order No. 99-06-DWQ.

35. California Water Code (CWC) Section 13263(a) requires that waste discharge requirements issued by the Regional Water Boards shall implement any relevant water quality control plans that have been adopted, and consider: (1) the beneficial uses to be protected and the water quality objectives reasonably required for that purpose; (2) other waste discharges; (3) the need to prevent nuisance; and (4) the provisions of CWC Section 13241. The Regional Water Board has considered the requirements of CWC Sections 13263 and 13241, and

applicable plans, policies, rules, and regulations in developing these waste discharge requirements.

36. The Regional Water Board adopted a *Water Quality Control Plan, Fourth Edition, for the North Coast Region* (hereinafter Basin Plan). The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin. "'Water quality standards' means beneficial use designations, water quality criteria based upon those beneficial uses, an antidegradation policy, and certain policies generally affecting the application and implementation of water quality standards. (40 C.F.R. Sections 131.6(a), (c), and (d); 40 C.F.R. Section 131.13.) "'Water quality objectives' means "the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area." (Water Code, Section 13050(h).) Water quality objectives and standards generally consist of narrative or numeric water quality criteria contained in the Basin Plan, the California Ocean Plan, the National Toxics Rule, the California Toxics Rule, State Implementation Policy for the California Toxics Rule, and other state or federally approved surface water quality plans." This Order implements applicable sections of the Basin Plan.

37. The beneficial uses of the Laguna de Santa Rosa, as identified in Table 2-1 of the Basin Plan are industrial and agricultural supply; water contact and non-contact recreation; ground water recharge; commercial and sport fishing; cold freshwater habitat; wildlife habitat. Proposed beneficial uses include municipal supply, warm fresh water habitat, spawning, rare, threatened or endangered species, migration of aquatic organisms process, and industrial process supply. The beneficial uses of the underlying ground water beneath the Mark West watershed urbanized areas as specified in the Basin Plan, are municipal and domestic water supply, industrial service, industrial process and agricultural supply.

38. The beneficial uses of Mark West Creek, as identified in Table 2-1 of the Basin Plan (Russian River tributary) are municipal, industrial and agricultural supply; industrial process supply; groundwater recharge; navigation; hydropower generation; water contact and non-contact recreation; commercial and sport fishing; warm freshwater habitat; cold freshwater habitat; wildlife habitat; fish migration and fish spawning habitat.

39. It is not feasible at this time to establish numeric effluent limits for pollutants in storm water discharges from MS4s. Therefore, the effluent limitations in this Order are narrative, and include the requirement to reduce pollutants in storm water discharges to the MEP. This Order requires the implementation of BMPs and measurable goals (in lieu of numeric effluent limitations) identified in the Permittees' Management Plan to control and abate the discharge of pollutants in storm water discharges. Implementation of BMPs and measurable goals in accordance with the Permittees' Management Plan and their schedules constitutes

compliance with MEP requirements, and with requirements to achieve water quality objectives.

40. It is not feasible at this time to establish numeric effluent limits for pollutants in non-storm water discharges from facilities owned or operated by the Permittees. Therefore, the effluent limitations in this Order are narrative, and include the requirement to reduce pollutants in non-storm water discharges through implementation of Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technologies (BCT). Until such time that effluent limits are developed, implementation of both structural and non-structural BMPs constitutes compliance with the CWA Section 301 for BAT/BCT effluent limitation standards.

41. This Order recognizes that there will be an increase in discharges of storm water because of continuing development within each Permittee's jurisdiction, and it is therefore possible that future degradation of receiving water quality could occur. The continued revisions and implementation of each Permittees' Management Plan in compliance with this Order will reduce the potential for discharges from MS4s to cause the degradation of receiving water quality. In addition, other measures implemented by the Management Plan are intended to reduce the impacts of storm water runoff from areas of existing development. This Order is therefore consistent with any applicable anti-degradation provisions of 40 CFR 131.12 and the State Water Board Resolution 68-16.

42. On March 12, 2001, the U.S. Court of Appeals ruled that it is necessary to obtain a NPDES permit for application of aquatic pesticides to waterways (*Headwaters, Inc. v. Talent Irrigation District*, 243 F.3d 526 (9th Cir. 2001). This decision is controlling in California for nonagricultural applications of pesticides to waterways. The State Water Board adopted a general NPDES permit (Order No. 2001-12-DWQ) on 19 July 2001, for public entities that discharge pollutants to waters of the United States associated with the application of aquatic pesticides for resource or pest management. Public entities that conduct such activities must seek coverage under this general permit.

43. Federal regulations (40 CFR 122.42(c)(7)) require the Permittees to submit an annual report that identifies water quality improvements or degradation.

44. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 et seq.) in accordance with Section 13389 of the CWC. The renewal of this NPDES permit is also exempt from CEQA pursuant to Title 14, California Code of Regulations, Section 15301, because it is for an existing facility.

45. This Order serves as an NPDES permit, pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect upon the date of hearing, provided that U.S. EPA has no objections.

46. This Order does not authorize any take of endangered species. To ensure that endangered species issues have been raised to responsible agencies, the Regional Water Board notified the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and the California Department of Fish and Game of Regional Water Board consideration of this Order.

Impaired Water Bodies

47. CWA Section 303(d) and 40 CFR 130.7 require States to identify water quality-impaired water bodies and pollutants of concern and develop Total Maximum Daily Loads (TMDLs). A TMDL is a quantitative assessment of the total pollutant load that can be discharged from all sources each day while still meeting water quality objectives. The Regional Water Board is currently in the process of developing TMDLs for listed water bodies within the Region. Once the Regional Water Board and U.S. EPA approve TMDLs, the Permittees' discharge of storm water into an impaired water body will be subject to load allocations and implementation plans established under the TMDLs. Certain early actions and/or assessments by the Permittees to address 303(d) listed water bodies and constituents are warranted and required by this Order. The Russian River and its tributaries (including Mark West Creek and the Laguna de Santa Rosa) are listed as impaired water bodies for sediments and temperature pursuant to Section 303(d) of the CWA. The Laguna de Santa Rosa and its tributaries are listed as impaired for nitrogen, phosphorus and low dissolved oxygen. The Laguna de Santa Rosa has been removed from the 303d list for ammonia due to the development of a waste load allocation, however the Regional Water Board have not determined that water quality objectives for ammonia are being met. Implementation of the Permittee's Management Plan is considered an essential element of the Laguna waste reduction strategy.

Public Process

48. The Regional Water Board has notified the Permittees and interested parties of its intent to prescribe waste discharge requirements for this discharge. Regional Water Board staff and Permittees' staff have worked closely together over the last year to develop the Management Plan and an Order to achieve a well integrated set of documents that will effectively protect water quality. The hearing on the Order was duly noticed. Accordingly, Permittees and interested parties have been given an opportunity to address the Regional Water Board at a public hearing and an opportunity to submit their written views and recommendations to the Regional Water Board.

49. The Regional Water Board has considered the information in the attached Management Plan, which is part of this Order, in developing the Findings of this Order.

50. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

THEREFORE IT IS HEREBY ORDERED that Order No. 97-3 is rescinded, and that each Permittee, their agents, successors and assigns, in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

The Permittees shall, within their respective jurisdictions, effectively prohibit, to the maximum extent practicable (MEP), the discharge of non-storm water (materials other than storm water): (1) from the municipal separate storm sewer systems; (2) to waters of the United States. NPDES permitted discharges, and discharges potentially authorized by Provision C.2, are exempt from this prohibition. Compliance with this prohibition shall be demonstrated in accordance with Provisions C.1 and C.2 of this Order.

B. RECEIVING WATER LIMITATIONS

1. Discharges from MS4s that cause or contribute to the violation of water quality standards (designated beneficial uses and water quality objectives developed to protect beneficial uses) are prohibited.

2. Discharges from MS4s to waters of the state shall not cause or contribute to the creation of pollution, contamination or nuisance, as defined in CWC Section 13050. Applicable to New Development and Significant Redevelopment: Post development runoff shall not cause or contribute to an exceedance of receiving water quality objectives.

3. If applicable water quality objectives are adopted and approved by the State Water Board after the date of the adoption of this Order, the Regional Water Board may revise and modify this Order as appropriate.

C. PROVISIONS

1. The Permittees shall comply with Discharge Prohibition A and Receiving Water Limitations B.1-B.3 through the timely implementation of control measures and other actions to reduce pollutants in the discharge in accordance with the Management Plan and other requirements of this permit, including any modifications. The Management Plan shall be designed to achieve compliance with Receiving Water Limitations B.1-B.3. If exceedance(s) of water quality standards persist notwithstanding implementation of the Management Plan, the Permittee(s) shall assure compliance with Discharge Prohibition A and Receiving Water Limitations B.1-B.3 by complying with the following procedure:

a. Upon a determination by either the Permittee(s) or the Regional Water Board that discharges are causing or contributing to an exceedance of an applicable WQS, the Permittees(s) shall promptly notify and thereafter submit a report to the Regional Water Board that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of WQSs. The report may be incorporated in the annual update to the Management Plan unless the Regional Water Board directs an earlier submittal. The report shall include an implementation schedule. The Regional Water Board may require modifications to the report;

b. Submit any modifications to the report required by the Regional Water Board Executive Officer within 30 days of notification;

c. Within 30 days following approval of the report described above by the Regional Water Board Executive Officer, the Permittees shall propose modifications of the Management Plan and monitoring program to incorporate the approved modified control measures that have been and will be implemented, the implementation schedule, and any additional monitoring required;

d. If the modifications are approved by the Regional Water Board, implement the modified Management Plan and monitoring program in accordance with the approved schedule.

As long as Permittees have complied with the procedures set forth above and are implementing the revised Management Plan, they do not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the Regional Water Board to develop additional control measures and BMPs.

Non-Storm Water Discharges

2. In carrying out Prohibition A of this Order, the elimination of following non-storm water discharges is not required under the specified conditions:

a. Exempted Discharges

i. Flows from riparian habitats or wetlands;
ii. Diverted stream flows;
iii. Springs;
iv. Rising groundwaters;
v. Uncontaminated groundwater infiltration; [as defined by 40 CFR 35.2005(20)]
vi. Uncontaminated pumped groundwater (from developed well points, etc.)

If any of the above categories of discharges, or sources of such discharges, are identified as sources of pollutants to receiving waters, then such categories or sources shall be addressed as conditionally exempted discharges in accordance with Provision C.2.b.

b. Conditionally Exempted Discharges

Pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1), the following categories of non-storm water discharges need only be prohibited from entering an MS4 if such categories of discharges are identified by the Permittees or the Executive Officer as causing or contributing to a violation of any water quality standard. However, at a minimum, the Permittees shall pursue the implementation of reasonable BMPs for elimination or reduction of pollutants from these categories of discharges. Such BMPs may consist of public education and outreach, development of a complaint response program or similar measures. Where feasible, alternatives that do not result in a discharge to receiving waters shall be encouraged.

i. Foundation drains
ii. Water from crawl space pumps
iii. Footing drains
iv. Air conditioning condensation
v. Water line flushing (dechlorinated or unchlorinated potable water)
vi. Landscape irrigation overspray or accidental release (if potable)
vii. Individual residential car washing
viii. Dechlorinated swimming pool discharges containing no biocides
ix. Street wash water
x. Fire hydrant flow testing
xi. Non-emergency fire fighting flows

3. When a discharge category above is identified as a significant source of pollutants to state waters, the Permittees shall either:

a Prohibit the discharge category from entering its MS4; or

b Not prohibit the discharge category and, instead, implement or require the responsible party(ies) to implement BMPs that will reduce pollutant loadings to the MEP, and

c Submit the following information to the Regional Water Board for approval of the Executive Officer within 180 days upon identification of such discharge category:

i The non-storm water discharge category listed above which the Permittees elect not to prohibit; and

ii The BMPs for each discharge category listed above which the Permittees will implement to prevent or reduce pollutants to the MEP.

Emergency fire fighting flows (i.e., water flows necessary for the protection of life or property) do not require immediate implementation of BMPs and are not prohibited. However, each Permittee shall meet with emergency response agencies to discuss reasonable measures to address minimizing the impacts of fire fighting flows to the environment. BMPs must be implemented to reduce pollutants from non-emergency fire fighting flows (i.e. flows from controlled or practice blazes) identified by the Permittee.

Management Plan

4. The Permittees shall implement control measures and BMPs to reduce pollutants in storm water discharges to the MEP. The Management Plan is intended to serve as the framework for identification, assignment, and implementation of such control measures/BMPs. The Management Plan describes how pollutants in storm water runoff will be controlled, and explains the BMPs that address the required program areas. Categories of BMPs implementation are listed as specific activities. Each activity includes a measurable goal and an Implementation Schedule timetable.

5. The following is a list of Management Plan elements that contain measurable goals:

   - Program Management;
   - Legal Authority;
   - Private Construction;
   - Industrial/Commercial Sources;
   - Municipal Operations;
   - Illicit Discharge Detection and Elimination;
   - Public Education and Outreach;
   - Effectiveness Evaluation;
   - Fiscal Analysis;
   - Monitoring Plan, and
   - Post-Construction Storm Water Treatment

6. Measurable goals are defined as the level of implementation necessary to demonstrate the control of pollutants in storm water to the MEP. The Permittees shall implement the Management Plan, and shall, through its continuous improvement process[1], subsequently demonstrate its effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce

[1] Continuous Improvement shall be defined as seeking new opportunities for improving Program effectiveness, controlling storm water pollution, and, protecting beneficial uses. The Program's approach to implementing the Management Plan explicitly acknowledges that "Maximum Extent Practicable" (MEP) is an ever evolving, flexible and advancing concept. As knowledge about controlling urban runoff continues to evolve so does the definition of MEP.

pollutants in storm water discharges to the MEP, and as required by Provisions C.1 through C. 41 of this Order.

7. The Permittees will submit Annual Reports documenting the status of the program. The Annual Reports include an evaluation of the activities (BMPs) and includes a workplan that is used to set the goals for the following year. The Permittees will meet with the Regional Water Board staff annually to discuss the work plan. Continuous Improvement and MEP concepts will be incorporated through review and discussion of the annual workplans. Final workplans, which include a formal Management Plan evaluation and specifically address the status of measurable goals and implementation schedules, will be included in the Annual Report.

8. Proposed modifications to the Management Plan, due to fiscal resource hardships or other reasons must be submitted in writing to Regional Water Board staff. The request shall contain details on the proposed revisions and documentation as to why the modifications are necessary. Regional Water Board staff will review the request in a timely manner and schedule the revisions for consideration by the Regional Water Board at a public meeting. If the Permittees request that the permit be re-opened to modify the Management Plan, modifications will be limited to the areas of the permit proposed for said modification.

9. Measurable goals shall be developed or revised through a process that includes opportunities for public participation. New or revised measurable goals may be based upon special studies or other activities conducted by the Permittees, literature review, or special studies conducted by other programs or Permittees. The Permittees shall submit a compilation of all proposed Management Plan revisions in the Annual Report. All proposed Management Plan revisions will be presented to the Regional Water Board for formal adoption.

Program Management

10. The goals of the Program Management element are to facilitate communication and coordination between the Permittees, Regional Water Board and other appropriate entities, and to ensure that Management Plan elements are implemented on schedule and that all requirements of this Order are met. The program management tools required by this Order are presented below.

Annual Work Plan: The Permittees shall convene a preliminary Annual Work Plan meeting by April 1 of each year. The Annual Work Plan meeting shall provide the Permittees' proposed activities for the upcoming year beginning 1 July of current year and ending June 30 the following year.

Annual Report: The Permittees shall submit an Annual Report by October 1 of each year. The Annual Report shall document the status of the Permittees' activities during the previous fiscal year, including the results of a qualitative and quantitative field level assessment of activities implemented by the Permittees,

and the performance of tasks contained in the Management Plan. The Annual Report shall include the annual workplan, and a compilation of deliverables and milestones completed during the previous twelve-month fiscal year period, as described in the Management Plan. In each Annual Report, the Permittees may propose pertinent updates, improvements, or revisions to the Management Plan, which shall, upon adoption by the Regional Board, be complied with under this Order.

Management Plan Modification: The Permittees' Management Plan may need to be modified, revised, or amended from time to time to respond to a change in conditions and to incorporate more effective approaches to pollutant control. Provisions of this Order require review and revision of certain elements of the Permittees' Management Plan. Proposed Management Plan revisions, proposed by the Permittees, should be included as part of the annual review process and incorporated in the Annual Report. In addition, the Permittees shall propose revisions to their Management Plan to comply with regional or watershed-specific requirements, and/or waste load allocations developed and approved pursuant to the process for the designation and implementation of TMDLs for impaired water bodies. In addition, the Regional Water Board may propose revisions to the Management Plan. Other than minor grammatical, spelling or other typographical errors, Management Plan revisions shall be brought before the Regional Water Board as permit amendments.

Annual Budget: Each Permittee shall report fiscal resources in each Annual Report, including all program expenditures and funding sources to meet those expenditures.

Memorandum of Understanding: Each Permittee shall collaborate with all other Permittees regulated under this Order, and/or related Phase II MS4 Permittees, to address common issues, promote consistency among the Permittees' Management Plan, coordinate resources in regional monitoring and outreach programs, and plan and coordinate activities required under this Order.

i. All Permittees shall jointly execute and submit to the Regional Water Board, by December 1, 2003 an updated Memorandum of Understanding (MOU), or other instrument of formal agreement, which, at a minimum, provides a management structure for the following:

   a) Designation of Joint Responsibilities;

   b) Decision making;

   c) Information management of data and reports, including the requirements under this Order; and

   d) Any and all other collaborative arrangements for compliance with this Order.

ii. All Permittees shall develop a standardized format for all reports required under this Order. The standardized reporting format shall be used by all Permittees and shall include protocols for electronic reporting. The Permittees shall submit the standardized format(s) to the Regional Water Board.

Legal Authority

11. The goals of the Legal Authority element are to effectively prohibit non-storm water discharges into the storm drain system and receiving water. In addition, the legal authority shall provide a framework for compliance assurance and progressive enforcement to ensure that the introduction of pollutants into the MS4 is reduced or eliminated. The Permittees have all developed legal ordinances and other mechanisms to limit pollutant discharges. The Permittees shall maintain and implement their legal authority to control pollutant discharges into and from its MS4 through ordinance, statute, permit, contract or similar means. This legal authority must, at a minimum, authorize the Permittees to:

a. Control the contribution of pollutants in discharges of runoff to its MS4.

b. Prohibit illicit connections to the MS4;

c. Control the discharge of spills, dumping, or disposal of materials other than storm water to its MS4;

d. Use enforcement mechanisms, including monetary fines, to require compliance with the Permittees' storm water ordinances, permits, contracts, and orders.

e. Control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements among Permittees;

f. Carry out all inspections, surveillance, and monitoring necessary to determine compliance and noncompliance with local ordinances and permits and with this Order, including the prohibition of illegal discharges to the MS4.

12. The Permittees shall amend or adopt a specific storm water and urban runoff ordinance or similar means to enforce all requirements of this Order.

13. The City and County shall provide to the Regional Water Board a statement certified by its chief legal counsel that the Permittee has adequate legal authority to implement and enforce each of the requirements contained in 40 CFR 122.26(d)(2)(i)(A-F) and this Order, including any modifications thereto in effect when the certified statement is provided. This statement shall be included as a revision to the Permittees' Management Plan in the submittal of the Annual Report that describes the following:

a. Citation of storm water related ordinances adopted by the Permittees and the reasons the ordinances are enforceable;

b. Identification of the local administrative and legal procedures available to mandate compliance with storm water related ordinances and therefore with the conditions of this Order;

c. Identification of all departments within the jurisdiction that conduct storm water pollution prevention related activities and their roles and responsibilities under this Order. The Annual Report shall include an up-to-date organizational chart specifying these departments and key personnel responsible for issuance of enforcement actions.

d. Description of how these ordinances are implemented and how enforcement actions under these ordinances may be appealed; and

e. Description of whether the municipality can issue administrative orders and injunctions or if it must go through the court system for enforcement actions.

Private Construction Element

14. The goals of the Private Construction element are to reduce the discharge of construction site related pollutants, especially sediments. The Permittee's Management Plan includes activities, measurable goals and an implementation schedule that specify BMPs intended to ensure reduction of construction site related pollutants to the MEP. Each Permittee has committed to continue to implement and improve the Construction Element of its Management Plan to reduce pollutants in runoff from construction sites during all construction phases. Included in this program are activities such as the following:

- Pollution prevention
- Grading ordinance modification
- Construction and grading approval process modifications
- BMP implementation
- Construction site inspections
- Enforcement measures for construction sites
- Reporting of non-compliant sites
- Education focused on construction activities

a. The Permittees have committed to ensuring that the following are effectively implemented at these construction sites:

i. Control sediments generated at the project site using adequate source control and/or structural BMPs;

ii. Control construction-related materials, wastes, spills, or residues at the project site to avoid discharge to streets, drainage facilities, receiving waters, or adjacent properties by wind or runoff; and

iii. Control non-storm water runoff from equipment and vehicle washing or any other activity at the project site.

iv. Control erosion from slopes and channels by implementing an effective combination of BMPs.

b. For construction sites that require coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity (hereinafter General Construction Permit), each Permittee will implement its ordinances and other legal authority to reduce pollutant discharges. The Permittees shall consider requiring proof that a Notice of Intent (NOI) for coverage under the General Construction Permit has been submitted and a waste discharge identification number obtained prior to the issuance of any discretionary permit.

c. For construction sites that are required to gain coverage under the General Construction Permit, the Permittees shall refer any identified non-filers (i.e., those projects that cannot demonstrate that they have submitted an NOI or received a WDID number) to the Regional Water Board within twenty days of discovery. In making such referrals, the Permittees shall include the project location, developer, estimated project size, and any records of communication with the developer regarding filing requirements.

d. Permittees have committed to inspect construction sites as necessary for compliance with applicable local ordinances. Each Permittee shall use its legal authority to promptly and effectively enforce its storm water ordinance(s) to correct any noncompliance observed during inspections. If noncompliance persists for a given construction site, the Permittee shall notify the Regional Water Board for further joint enforcement action.

e. Each Permittee shall provide training to employees in targeted positions (whose jobs or activities are engaged in construction activities including construction inspection staff) regarding the requirements of this Order.

Industrial/Commercial Program

15. The goals of the Industrial/Commercial Program are to reduce the potential for pollutants to contact storm water. Permittees have committed to implement the industrial/commercial facilities program as described in the Management Plan to reduce pollutants in storm water runoff to the MEP. Typical measures included Industrial/Commercial Program consist of the following:

a) Maintenance of an inventory or database of all facilities within its jurisdiction that are potential significant sources of storm water pollution as defined below:

   i. Commercial facilities

      - Food facilities;
      - Retail gasoline outlets; and
      - Automotive service facilities

   ii. Other Federally-mandated facilities [as specified in 40 CFR 122.26(d)(2)(iv)(C)]

      - Municipal landfills;
      - Hazardous waste treatment, storage disposal, and/or recovery facilities; and

   iii. Facilities subject to SARA Title III (also known as EPCRA) reporting requirements.

b) Include in the inventory the following fields of information for each identified industrial and commercial facility:

   i. Name and address of facility owner/operator;

   ii. Coverage under the General Industrial Permit or other individual or general NPDES permits; and

   iii. Narrative description including SIC codes that best reflects the industrial activities at and principal products of each facility.

   iv. The Permittees shall update its inventory annually.

c) Inspections

   The City and County have committed that the following categories of facilities within their respective jurisdictions are inspected as specified below.

   i. Retail Food Facilities (including restaurants, markets, bars, bakeries and bed & breakfast establishments).

      The City and County, in cooperation with the appropriate department (such as health, industrial waste or public works), shall ensure that retail food facilities within its jurisdiction are inspected to confirm that storm water BMPs are being effectively implemented in compliance with City and County ordinances, state law, the Management Plan, and this Order.

At each retail food facility, inspectors shall verify that the operator:

- has received educational materials on storm water pollution prevention practices;
- does not pour oil, grease or grease residue onto a parking lot, street or adjacent drain inlet;
- keeps the trash bin area clean and trash bin lids closed, and does not fill trash bins with washwater or any other liquid;
- does not allow illicit discharges, such as discharge of washwater from floor mats, floors, porches, parking lots, alleys, sidewalks, and streets (in the immediate vicinity of the establishment), filters, or garbage/trash containers; and
- removes food waste, rubbish, or other materials from parking lots in a sanitary manner that does not create a nuisance or discharge to the storm drain.

ii. Retail Gasoline Outlets (RGO)

The City and County, in cooperation with the appropriate department (such as health, industrial waste or public works), shall confirm that BMPs are being effectively implemented at each RGO within its jurisdiction, and that outreach materials are provided, in compliance with the Management Plan and the California Storm Water Quality Association BMP Guide for RGOs.

Inspectors shall verify that each operator:

- Routinely sweeps fuel-dispensing areas to remove litter and debris, and keeps rags and absorbents ready for use in case of leaks and spills;
- Is aware that wash down of facility area to the storm drain is prohibited;
- Is aware of design flaws (such as grading that does not prevent run-on, or inadequate roof covers and berms), and that equivalent BMPs are implemented;
- Inspects and ensures that storm drain inlets are clean within each facility's boundaries prior to the onset of the rainy season;
- Posts signs close to fuel dispensers warning vehicle owners/operators against "topping off" of vehicle fuel tanks and installation of automatic shutoff fuel dispensing nozzles;
- Routinely checks outdoor waste receptacle and air/water supply areas, cleans leaks and drips, and ensures that only watertight waste receptacles are used and that lids are closed; and
- Trains employees to properly manage hazardous materials and wastes as well as to implement other storm water pollution prevention practices.

iii. Automotive Service Facilities

The City and County, in cooperation with the appropriate department (such as health, industrial waste or public works), shall ensure that automotive service facilities within its jurisdiction are inspected to confirm that storm water BMPs are effectively implemented in compliance with City and County ordinances, the Management Plan, and this Order. At each automotive service facility, inspectors shall verify that each operator:

- Maintains the facility area so that it is clean and dry and without evidence of excessive staining;
- Implements housekeeping BMPs to prevent spills and leaks;
- Properly discharges wastewaters to a legal point of disposal;
- Is aware of the prohibition on discharge of non-storm water materials to the storm drain;
- Properly manages raw and waste materials including proper disposal of hazardous waste;
- Protects outdoor work and storage areas to prevent contact of pollutants with rainfall and runoff;
- Inspects and routinely cleans storm drain inlets that are located on the facility's property; and
- Trains employees to implement storm water pollution prevention practices.

iv. Facilities Covered under the General Industrial Permit

Permittees need not routinely inspect facilities that are covered by the Regional Water Board's general industrial storm water Permit. Permittees are expected to inspect industrial facilities covered under the general industrial storm water permit on a complaint basis, and shall conduct these inspections as specified below.

Level of Inspection: City and County inspectors shall confirm that each operator (1) has a current Waste Discharge Identification (WDID) number for facilities discharging storm water associated with industrial activity, (2) that a Storm Water Pollution Prevention Plan is available on-site, and (3) is effectively implementing BMPs in compliance with City and County ordinances, the Management Plan, and this Order.

d). Permittees shall ensure compliance of pollutant sources through the following:

i. BMP Implementation: In the event that a Permittee determines that a specific BMP is infeasible at any site, the Permittee shall require implementation of other BMPs that will achieve the equivalent reduction of pollutants in the storm water discharges. In addition, for those BMPs

that are not adequate to achieve water quality objectives, the Permittees may require additional site-specific controls, such as Treatment Control BMPs.

ii. Progressive Enforcement: The Permittees have committed to a progressive enforcement policy to ensure that facilities are brought into compliance with all storm water requirements within a reasonable period as specified below.

a) In the event that the Permittees determine, based on a complaint inspection conducted above, that an operator has failed to adequately implement all necessary BMPs, the Permittees shall take progressive enforcement as outlined in the Management Plan.

b) In the event that the Permittees determine that an operator has failed to adequately implement BMPs after a follow-up inspection, the Permittees shall take further enforcement action as established through authority in its municipal code and ordinances or through the judicial system.

c) The Permittees shall maintain records, including inspection reports, warning letters, notices of violations, and other enforcement records, demonstrating a good faith effort to bring facilities into compliance.

iii. Interagency Coordination

a) Referral of Violations of Municipal Storm water Ordinances, the Management Plan, or this Order: Each Permittee shall notify the Regional Water Board of industrial facilities in its jurisdiction that receive three violation notices. The notification to the Regional Water Board shall include the pertinent details necessary for the Regional Water Board to conduct its own inspections and/or pursue enforcement in addition to the Permittees' own progressive enforcement actions.

b) Referral of Violations of the General Industrial Permit: The Permittees shall notify the Regional Water Board of industrial facilities in its jurisdiction that, through a complaint inspection, receive a violation notice. This requirement is limited to those industrial facilities that must be covered under the General Industrial Permit. The notification to the Regional Water Board shall include at least the following:

- Name of the facility;
- Operator of the facility;
- Owner of the facility;

- Industrial activity being conducted at the facility that is subject to the General Industrial Permit; and
- Records of communication with the facility operator regarding the violation, which shall include at least an inspection report and one written notice of the violation.

Municipal Operations Program

16. The goals of the Municipal Operations Program are to prevent or reduce pollutants in runoff from all municipal land use areas, facilities, and activities. The Permittees have committed to implement the Management Plan's Municipal Operations Program to address the following:

- Public construction activities management
- Vehicle maintenance/material storage facilities/corporation yards management
- Landscape and recreational facilities management
- Storm drain operation and maintenance
- Streets and roads maintenance
- Parking facilities management
- Emergency procedures

A discussion of each component is provided below.

a. **Public Construction Activities Management**

i. The Permittees have committed to implement the Development Standard requirements at public construction projects as defined in the Management Plan.

ii. The Permittees have committed to implement the Construction Site BMPs at Permittee-owned construction sites as defined in the Management Plan.

iii. The Permittees have committed to obtain coverage under the General Construction Permit for applicable public construction sites as defined in the Management Plan.

b. **Vehicle Maintenance/Material Storage Facilities/Corporation Yards Management**

i. The Permittees shall implement BMPs to minimize pollutant discharges in storm water. These BMPs shall include, but not be limited to, good housekeeping practices, material storage control, vehicle leak and spill control, and illicit discharge control.

ii. By the end of the permit term, the Permittees shall prepare and implement Storm Water Pollution Prevention Plans (SWPPPs) for public vehicle maintenance facilities, material storage facilities, and corporate yards having the potential to discharge pollutants to storm water. The SWPPPs shall, at a minimum, contain all the elements required for SWPPPs required under the State General Permit for Discharges of Storm Water Associated with Industrial Activities

iii. The Permittees shall implement the following measures to prevent the discharge of pollutants to the MS4:

a) By the end of this permit term, all vehicle and equipment wash areas (except for fire stations) shall either be self-contained; equipped with a clarifier; equipped with an alternative pre-treatment device; plumbed to the sanitary sewer, or otherwise be prevented from discharging pollutants to surface water.

b) For new facilities, or during redevelopment of existing facilities (including fire stations), all vehicle and equipment wash areas shall be either self-contained, plumbed to the sanitary sewer and equipped with a pre-treatment device or otherwise constructed to prevent the discharge of pollutants to surface water.

c. **Landscape and Recreational Facilities Management**

The Permittees have committed to implement the Landscape and Recreational Facilities Management portion of its Management Plan, addressing the following requirements:

- Pesticide Management
- Fertilizer Management
- Native Vegetation
- Landscape Waste Disposal
- Recreational Water Bodies

The objectives of this program shall be to: Follow a management plan and staff training protocols for routine and non-routine, safe storage and application of pesticides, herbicides (including pre-emergents), and fertilizers, in order to minimize the discharge of these substances to the storm drain system. In implementing the identified program, the Permittees will give consideration to the following measures:

i. Give preference to alternatives to chemical applications where feasible;

ii. Prevent the disposal of landscape wastes into the storm drain system;

iii. Minimize trash, debris and other pollutants from entering Permittee-owned water bodies;

iv. Discharge municipal swimming pool water in a manner that will not contribute pollutants to receiving waters. Provide for consistency with the State Board's guidelines and monitoring requirements for application of aquatic pesticides to surface waters (WQ Order No. 2001-12 DWQ);

v. Avoid, to the extent feasible, application of pesticides or fertilizers immediately before, during, or after a rain event or when water is flowing off the application area;

vi. Ensure no application or storage of banned or unregistered pesticides;

vii. Ensure that staff applying pesticides are certified by the California Department of Food and Agriculture, or under the direct supervision of a certified pesticide applicator;

viii. Implement procedures to (1) encourage retention and planting of native vegetation and (2) to reduce water, fertilizer, and pesticide needs;

d. **Storm Drain Operation and Maintenance**

The Permittees have committed to implement the Storm Drain Operation and Maintenance portion of its Management Plan, addressing the following:

- Drainage System Mapping
- Clean and Inspect Storm Drainpipes and Inlet Structures
- Open Channel or Roadside Ditch Inspection and Maintenance
- Storm Drain Labeling

The objectives of this program shall be to:

i. Implement a schedule for placing appropriate stencils or labels (e.g., "No Dumping – Drains to Creek") and replacing worn or missing labels for drain inlets .

ii. Implement a schedule to inspect and clean out storm drainpipes and inlets.

iii. Keep inspection, cleaning and maintenance records for drain inlets.

iv. Implement BMPs for storm drain maintenance that include:

a) A program to visually monitor Permittee-owned open channels, detention basins and other drainage structures for debris at least

annually and identify and prioritize problem areas of illicit discharge for regular inspection;

b) A review of current maintenance activities to ensure that appropriate storm water BMPs are being used to protect water quality;

c) Implement a program for the removal of trash and debris from identified open channel, detention basins and storm drains, as needed, before the wet weather season;

d) Minimize the discharge of contaminants during MS4 maintenance and clean outs;

e) Proper disposal of material removed; and

f) Record keeping for cleaning and maintenance of open channels and other drainage structures.

e. **Streets and Road Maintenance**

i. The Permittees have designated streets and/or street segments within its jurisdiction as one of the following:

Priority A: Streets and/or street segments that are designated as consistently generating the highest volumes of trash and/or debris.

Priority B: Streets and/or street segments that are designated as consistently generating moderate volumes of trash and/or debris.

Priority C: Streets and/or street segments that are designated as generating low volumes of trash and/or debris.

The Permittees have committed to perform street sweeping of curbed streets according to Management Plan schedules.

ii. The Permittees shall provide measures to address the following:

a) Sawcutting wastes shall be recovered and disposed of properly.

b) Concrete and other street and road maintenance materials and wastes shall be managed to prevent discharge to the MS4; and

c) The washout of concrete trucks and chutes shall only occur in designated areas and not discharged to storm drain inlets, open ditches, or streets.

d) To the extent feasible, paving activities are performed during dry weather.

iii. The Permittees have committed to annually train their employees in targeted positions (whose interactions, jobs, and activities affect storm water quality) regarding the requirements of the storm water management program to (1) promote a clear understanding of the potential for maintenance activities to pollute storm water, and (2) identify and select appropriate BMPs.

f. **Parking Facilities Management**

Permittee-owned parking lots exposed to storm water are should be inspected and cleaned as scheduled in the Management Plan to ensure that they are kept clear of debris and excessive oil buildup.

g. **Emergency Procedures**

The Permittees have committed to repair essential public services and infrastructure in a manner that minimizes environmental damage in emergencies such as earthquakes, fires, floods, landslides, or windstorms. BMPs shall be implemented to the extent that measures do not compromise public health and safety. After initial emergency response or emergency repair activities have been completed, each Permittee shall implement BMPs and programs as required by this Order.

Illicit Discharge Detection and Elimination Program

17. The goals of Illicit Discharge Detection and Elimination program element are to continue to identify and eliminate non-permissible non-storm water discharges associated with illegal dumping or illicit connections to the storm drain system. Annual reporting for this program area shall, at a minimum, include the number of responses to reports of potential impacts to water quality, complaints, spills, and other similar reports.

The Permittees have committed to implement an Illicit Discharge Detection and Elimination Program containing measures to actively seek and eliminate illicit discharges and connections as described in the Management Plan. The Illicit Discharge Detection and Elimination element contains the following:

i. Investigation/inspection and follow-up procedures
ii. Elimination of illicit discharges and connections
iii. Enforcement of ordinances
iv. Prevention and response procedures for failing septic tanks
v. Public reporting of illicit discharges and connections
vi. Appropriate disposal of used oil and toxic materials

a. **Illicit Discharge Investigation, Abatement and Cleanup**: The Permittees have committed to investigate illicit discharges as soon as practicable (during or immediately following containment and cleanup activities), and take enforcement action as appropriate.

b. **Illicit Connections Investigation, Abatement and Cleanup**

i. Investigation: Upon discovery or upon receiving a report of a suspected illicit connection, the Permittees have committed to initiate an investigation, as detailed in the Management Plan, to determine the source of the connection, the nature and volume of discharge through the connection, and the responsible party for the connection.

ii. Termination: Upon confirmation of the illicit nature of a storm drain connection, the Permittees have committed to ensure termination of the connection using enforcement authority as needed.

iii. Training: The Permittees have committed to continue to ensure that all employees responsible for identification, investigation, termination, cleanup, and reporting of illicit connections and discharges are sufficiently trained.

Public Education and Outreach

18. The goals of Public Education and Outreach program (PEOP) element are to identify and change behaviors that adversely affect water quality and to increase the understanding and appreciation of storm water systems and the impact of storm water runoff. The Permittees have committed to implement a PEOP, as detailed in the Management Plan, using all media as appropriate to (1) measurably increase the knowledge of target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment. Each Permittee shall incorporate a mechanism for public participation in the implementation of the Management Plan (e.g., programs that engage the public in cleaning up creeks, removal of litter in river embankments, and storm drain stenciling). To meet the Management Plan objectives and requirements of this Order, at a minimum, the PEOP includes the following programs:

i. Storm drain inlets to be marked with a legible “No Dumping” message.

ii. Installation of signs with prohibitive language discouraging illegal dumping, including pet wastes, to be posted at some designated public access points to creeks, channels and other relevant water bodies.

a. The PEOP includes the following components:

i. Website information;
ii. Media outreach;
iii. Public service announcements;
iv. "How To" instructional material distributed in a targeted and activity-related manner;
iv. Business, community association, and environmental organization tie-ins;
vi. Events targeted to specific activities and population subgroups;
vii. Private septic tank management;
viii. Proper discharge of swimming pool water;
ix. Lawn and garden care and product use, both residential and retail;
x. Disposal of household hazardous wastes;
xi. Education on impacts of illicit discharges;
xii. Spring Lake Environmental Discovery Center activities;
xiii. Proposed ecology/environmental column in local newspaper
xiv. Adopt-a-creek (creek stewardship)

b. The PEOP targets the following groups:

i. Municipal departments and personnel;
ii. Construction site contractors, developers and engineering contractors;
iii. Industrial owners and operators
iv. Commercial owners and operators (e.g., RGOs and restaurants)
v. Residential community, general public, and school children
vi. High school students from each of the six public high schools.

c. The Management Plan includes an Industrial/Commercial Outreach program to educate and inform business owners and operators about storm water regulations. Businesses targeted by this program include the following:

ii. Automotive repair
iii. Food facilities
iv. Mobile cleaning industries
v. Landscape contractors
vi. Retail gasoline outlets;
vii. Building and construction industries (SRA-SUSMP)

As detailed in the Management Plan, the Industrial/Commercial outreach program includes: (1) conferring with owners and operators to explain storm water regulations; (2) distributing and discussing educational material regarding storm water pollution and BMPs, (3) explaining penalties for noncompliance, and (4) providing owners and operators with suggestions to facilitate employee compliance with storm water regulations.

Effectiveness Evaluation

19. The Permittees shall assess the effectiveness of the implementation of their respective Management Plan components in their Annual Reports. The assessment shall address specific direct and indirect measurements that the Permittees will use to track the long-term progress of their Management Plan towards achieving improvements in receiving water quality. Direct and indirect measures of effectiveness shall include, but are not limited to: conformance with established measurable goals; review of monitoring data for water quality trends; quantity of debris removed from the storm drain system; assessing the impact of public outreach activities through pre- and post-site visit evaluations and special studies to determine BMP effectiveness. Methods to improve effectiveness in the implementation of tasks and activities including development of new, or modification of existing BMPs and measurable goals, shall be identified through the Management Plan effectiveness evaluation. Annual Reports shall also include each Permittee's self-assessment of its "status of compliance" with each element of the Management Plan and this Order

Fiscal Analysis

20. Each Permittee shall continue to secure the resources necessary to meet the requirements of this Order. In order to demonstrate sufficient financial resources to implement the conditions of this Order, each Permittee shall conduct an annual fiscal analysis as part of its Annual Report. This analysis shall, for each fiscal year covered by this Order, evaluate the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities of the Permittee's Management Plan. This analysis shall include a description of the source(s) of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds.

Monitoring Plan

21. A monitoring plan is included as part of the Management Plan. This program provides information to characterize storm water discharge and receiving water quality, evaluate BMP performance, and assess Management Plan effectiveness. The Permittees shall implement two special monitoring studies during the permit term. The specifics of the projects will be reviewed and approved by Regional Board staff prior to implementation.

Santa Rosa Area-Standard Urban Storm Water Mitigation Plan

22. The Management Plan includes the SRA-SUSMP that contains measurable goals and an implementation schedule to address the post-construction impacts of applicable new and redevelopment projects on storm water quality. The overriding goals of the SRA-SUSMP are to manage storm water runoff from new development and significant redevelopment for both quality and quantity, as close to the point of origin as possible, and to conserve natural areas of the development site. The Permittees will create supporting documents, including an SRA-SUSMP Guidance Document, in accordance with the following:

    a. Through SRA-SUSMP implementation, the Permittees shall minimize the short and long-term impacts on receiving water quality from all new development and significant redevelopment.

    b. Permittees shall incorporate water quality and watershed protection principles into planning procedures and policies such as: the General Plan or equivalent plans (e.g., Comprehensive, Master or Community Plan) to direct land use decisions and require implementation of water quality protection measures for applicable development projects. These principles and policies shall be designed to protect natural water bodies, reduce impervious land coverage, reduce runoff impacts, and where feasible, maximize opportunities for infiltration of rainwater into soil. Such water quality and watershed protection principles and policies shall consider the following:

        i. Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and, where feasible, manage storm water runoff for both quality and quantity, as close to the point of generation as possible.
        ii. Implement pollution prevention methods supplemented by pollutant source controls and treatment controls. Where practical, use strategies that control the sources of pollutants or constituents (i.e., the point where water initially meets the ground) to minimize the transport of storm water and pollutants off-site and into MS4s.
        iii. Preserve and where feasible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands and buffer zones.
        iv. Limit disturbances of natural water bodies and natural drainage systems caused by development, including roads, highways, and bridges.
        v. Use existing drainage master plans or studies to estimate increases in pollutant loads and flows resulting from projected future development and require incorporation of structural and/or non-structural BMPs to mitigate the projected increases in pollutant loads in runoff flows.
        vi. Identify and avoid development in areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that protects areas from erosion and sediment loss.

vii. Implement source and structural controls as necessary to protect downstream receiving water quality from increased pollutant loads in runoff flows from new development and significant redevelopment.

viii. Control the post-development peak storm water run-off discharge rates and velocities to maintain or reduce pre-development downstream erosion, and to protect stream habitat.

ix. Control pollutant loads that cause a violation of receiving water quality objectives or that have not been reduced to the MEP.

SRA-SUSMP Requirement Section

23. The Permittees have committed to implement the SRA-SUSMP in accordance with the implementation schedule contained in the Management Plan. The SRA-SUSMP is designed to implement pollutant control measures on new development and significant redevelopment projects. Specifically, the program includes the following 3 elements.

24. Source control design measures – Recommend site design and controls to minimize site runoff and to reduce the potential for pollutants to enter runoff flows. Such measures include designs that minimize imperviousness, retain natural areas, and minimize the use of chemicals and other materials. The SRA-SUSMP shall implement a process for implementing such measures into individual project approvals.

25. Post-development storm water pollutant treatment – Criteria to be utilized to determine which new development or significant redevelopment projects will be subject to required implementation of post-development storm water treatment controls. **The criteria is based on location of the project (environmentally sensitive areas) and project size. analysis.** The plan shall also include design storm sizing criteria and shall include measures to ensure that approved control measures are implemented operated and maintained. At a minimum, the post-development storm water treatment program shall include the criteria identified in Provision 24 below.

26. Post-development storm water flow control – Implementation of a program to mitigate impacts of increases in runoff flow quantities and time of concentration.

27. Upon implementation of the SRA-SUSMP, as specified in the Management Plan time-schedule, Permittees shall ensure that all new development and significant redevelopment projects falling under the priority project categories listed below, implement post-development control measures. As proposed, the SRA-SUSMP post-development controls shall apply to all priority projects or phases of priority projects that require a discretionary permit within the following four categories:

Priority Development Project Categories

a. Development projects that create one acre (43,560 square feet) or more of new impervious surface. This category includes development of any type on public or private land, which falls under the permitting authority of the Permittees. Impervious surface calculations shall include all areas where improvements result in a ground surface that significantly limits natural percolation rates including, but not limited to, asphalt, cement, pavers, buildings and plastic liners that are associated with the project. The determination shall be based on the cumulative calculation of impervious surfaces based on the overall plan of development.

b. Streets, roads, highways and freeways projects creating one acre or more of new impervious surface. This category includes any newly constructed impervious surfaces used for the transportation or support of the transportation of pedestrians, bicycles and motorized vehicles.

c. Redevelopment projects that are located on an already developed sites and result in the addition of and/or reconstruction of one acre or more of new impervious surface. Only the additional and/or reconstructed portion(s) of the site must be included in treatment design. Excluded from this category are interior remodels and routine maintenance or repair, including roof or exterior surface replacement and resurfacing.

d. Development and redevelopment projects located directly adjacent to a natural waterway, modified natural waterway, or constructed channel, or that require a new storm drain outfall to such waterway, regardless of project size or impervious surface. This requirement is intended to protect environmentally sensitive areas. For redevelopment projects, excluded from this category are interior remodels and routine maintenance or repair, including roof or exterior surface replacement and resurfacing.

28. Numeric Sizing Criteria – The Permittees shall employ numeric sizing criteria for structural treatment BMPs and ensure that it is comparable to the following numeric sizing criteria:

i. Volume-based BMPs shall be designed to mitigate (infiltrate or treat) either:

a. The volume of runoff produced from the 85th percentile of 24-hour storm event, as determined from the local historical rainfall record (approximately .92 inches in the Santa Rosa area); or

b. The volume of runoff produced by the 85th percentile 24-hour rainfall event, determined using the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, pp. 170-178 (1998); or

c. The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in *California Storm Water Best Management Practices Handbook-Industrial/Commercial (1993); or*

ii. Flow-based BMPs shall be designed to mitigate (infiltrate or treat) either:

a. The flow rate of runoff produced by the 85th percentile mean annual 24 hour storm event hourly rainfall intensity, as determined from the local historical rainfall record; or

b. The maximum flow rate of runoff, as determined from local historical rainfall records, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity; or

c. Equivalent Numeric Sizing Criteria - The Permittees may develop or use any equivalent numeric sizing criteria or performance-based standard for post-construction structural treatment BMPs as part of these requirements. Such equivalent sizing criteria may be authorized by Regional Board staff for use in place of the above criteria. In the absence of an equivalent numeric sizing criteria, the criteria contained above shall be implemented.

29. When implementing these sizing criteria, the Permittee's shall include a safety factor to ensure that treatment BMPs accommodate these minimum design storms at all times. The sizing of filtering treatment devices shall recognize potential clogging and loss of capacity during operation and shall be sized to provide full treatment of the design storm at all times.

SRA-SUSMP Protocols

30. Pollutants and Activities of Concern – The SRA-SUSMP shall consider pollutants of concern or activities of concern in identifying appropriate BMPs for new development or significant redevelopment projects. In selecting BMPs, the following shall be considered: the procedure shall include, at a minimum, consideration of (1) the Target Pollutants; (2) land use and pollutants associated with that land use type; (3) pollutants/activity expected to be present on site; and (4) changes in flow rates and volumes resulting from the development project and sensitivity of receiving waters to changes in flow rates and volumes.

31. Implementation Process – The Management Plan shall describe the process used to ensure SRA-SUSMP program implementation and all proposed modifications to the process. The process shall identify at what point in the planning process development projects will be required to meet the SRA-SUSMP. The process shall also include identification of the roles and responsibilities of various municipal departments in implementing these standards, as well as any other measures necessary for the implementation of these standards.

32. Infiltration and Groundwater Protection – To protect groundwater quality, the Permittee shall apply restrictions to the use of structural BMPs designed to primarily function as infiltration devices (such as infiltration trenches and infiltration basins). Such restrictions shall ensure that the use of such infiltration structural treatment BMPs shall not cause a violation of applicable groundwater quality objectives.

Downstream Erosion

33. The SRA-SUSMP shall include any existing criteria or proposed modifications to ensure that discharges from new development and significant redevelopment address the potential for downstream erosion and protect stream habitat. The SRA-SUSMP shall include criteria for runoff calculations for pre-development and post-development runoff conditions. The design shall limit post-development runoff to pre-development quantities. The runoff calculations shall be based on the channel-forming discharge in the downstream waterway. At a minimum, the Permittees' SRA-SUSMP Guidance Documents shall include measures to control peak storm water discharge rates and velocities in order to protect downstream erosion and stream habitat. Storm water discharge volumes and durations should also be considered in the SRA-SUSMP.

Waiver Program

34. A waiver program is included as part of the SRA-SUSMP. The Permittees may develop an alternative waiver program that would require any developers receiving waivers to transfer the savings in cost, as determined by the Permittee, to a storm water mitigation fund. Any Permittee may consider a waiver for projects where structural treatment BMPs are infeasible. The Permittee shall only grant a waiver when all appropriate structural treatment BMPs have been considered and rejected as infeasible. The Permittees shall notify the Regional Water Board within ten business days of each waiver issued and shall include the name of the person granting each waiver. Funds may be used on projects to mitigate the impacts of the discharge from the specific development. Guidance for the compilation of the waiver program shall address the following:

    a. The entity or entities that will manage (i.e., assume full responsibility for) the storm water management fund;

    b. The range and types of acceptable projects for which mitigation funds may be expended;

    c. The entity or entities that will assume full responsibility for each mitigation project, including its successful completion;

d. How the dollar amount of fund contributions will be determined and managed.

Maintenance Agreement and Transfer

35. The Permittees shall require that all developments subject to SRA-SUSMP and site specific plan requirements provide verification of maintenance provisions for structural and treatment control BMPs, including but not limited to legal agreements, covenants, California Environmental Quality Act (CEQA) mitigation requirements, and or conditional use permits. Verification shall include, at a minimum, either the developer's signed statement accepting responsibility for maintenance until the responsibility is legally transferred; and either:

a. A signed statement from the public entity assuming responsibility for structural or treatment control BMP maintenance and that it meets all local agency design standards; or

b. Written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance and conduct a maintenance inspection at least once a year; or

c. Written text in project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to a home owner's association for maintenance of structural and treatment control BMPs; or

d. Any other legally enforceable agreement that assigns responsibility for the maintenance of post-construction structural or treatment control BMPs.

Regional Storm Water Mitigation Program

36. The Permittees may apply to the Regional Water Board for approval of a regional or sub-regional storm water mitigation program to substitute in part or wholly Development Standard requirements. Upon review and a determination by the Executive Officer that the proposal is technically valid and appropriate, the Regional Water Board may consider for approval such a program if its implementation will:

a. Result in equivalent or improved storm water quality;
b. Protect stream habitat;
c. Promote cooperative problem solving by diverse interests;
d. Be fiscally sustainable via secured funding; and
e. Be completed in five years, including the construction and start-up of treatment facilities.

Nothing in this provision shall be construed as to delay the implementation of Development Standard requirements as required by this Order.

Mitigation Funding

37. The Permittees may propose a management framework, for endorsement by the Executive Officer, to support regional or sub-regional solutions to storm water pollution, where any of the following situations occur:

    a. Treatment of area-wide runoff is feasible and appropriate
    b. Legislative, grant or other funding sources become available;
    c. Off-site mitigation is required because of loss of environmental habitat; or
    d. An approved watershed management plan or a regional storm water mitigation plan exists that incorporates an equivalent or improved strategy for storm water mitigation.

California Environmental Quality Act (CEQA) Document Update

38. The Permittees shall incorporate into their CEQA process procedures for considering potential storm water quality impacts and providing for appropriate mitigation when preparing and reviewing CEQA documents. As referenced in the Management Plan, the procedures shall consider the following:

    a. Potential impact of project construction on storm water runoff;
    b. Potential impact of project post-construction activity on storm water runoff;
    c. Potential for discharge of storm water from material storage areas, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas;
    d. Potential for discharge of storm water to negatively impact the beneficial uses of the receiving waters or sensitive areas that provide water quality benefit;
    e. Potential for the discharge of storm water to cause adverse impacts to the biological integrity of the waterways and water bodies;
    f. Potential for significant changes in the flow velocity or volume of storm water runoff that can cause environmental harm; and
    g. Potential for significant increases in erosion of the project site or downstream areas.

General Plan Update

39. The Permittees have committed do the following:

    a. Amend, revise, or update its General Plan to include watershed and storm water quality and quantity management considerations and policies when any of the following General Plan elements are updated or amended: land use, public services and facilities, open space and conservation, noise and safety, water resources, conservation, and open space.

b. Provide the Regional Water Board with the draft amendment or revision when a listed General Plan element or the General Plan is noticed for comment in accordance with California Government Code Section 65350 *et seq*.

Targeted Employee Training

40. The Permittees have committed to train its employees in targeted positions (whose jobs or activities are engaged in development planning), regarding the requirements of this Order that affect development planning, on at least an annual basis.

Technical Guidance and Information for Developers

41. The Permittees shall develop and make available to the developer community SRA-SUSMP guidelines. The Permittees shall issue a technical manual for the siting and design of BMPs for the development community. The technical manual may be adapted from the revised California Storm water Quality Task Force Best Management Practices Handbooks or through other approved technical manuals. The technical manual shall at a minimum include:

i. Treatment Control BMPs based on flow-based and volumetric water quality design criteria;

ii. Peak Flow Control criteria to control peak discharge rates, velocities and duration;

iii. Expected pollutant removal performance ranges obtained from national databases, technical reports and scientific literature;

iv. Maintenance considerations; and

v. Cost considerations.

Additional Requirements

42. This Order may be modified or alternatively revoked or reissued prior to the expiration date as follows: (1) to address a significant change in conditions identified in technical reports required by the Regional Water Board that was unknown at the time of the issuance of this Order; (2) to incorporate applicable requirements of statewide water quality control plans adopted by the State Board or amendments to the Basin Plan approved by the State Board; (3) to incorporate applicable requirements of future State Water Board orders, or (4) to comply with any applicable requirements, guidelines, or regulations issued or approved under Section 402(p) of the CWA, if the requirement, guideline, or regulation so issued or approved contains different conditions or additional requirements not provided for in this Order; or (5) to modify or delay the implementation of measurable

goals in the Management Plan. The Order as modified or reissued under this paragraph shall also contain any other requirement of the CWA when applicable.

43. Each Permittee shall comply with all applicable items of the "General Monitoring and Reporting Provisions," dated May 20, 1993, which are part of this Order.

44. Each Permittee shall comply with all applicable items of the "Standard Provisions and Monitoring Requirements for Waste Discharge Requirements (NPDES)," dated March 1, 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provisions."

45. This Order expires on June 26, 2008. The Permittee must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for re-issuance of waste discharge requirements.

46. The Regional Administrator of the U.S. EPA or the Executive Officer may grant permission to submit a Report of Waste Discharge at a later date prior to the expiration date of this Order.

Certification

I, Susan A. Warner, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on June 26, 2003.

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Susan A. Warner
Executive Officer

(npdesMS4srsoscwa)